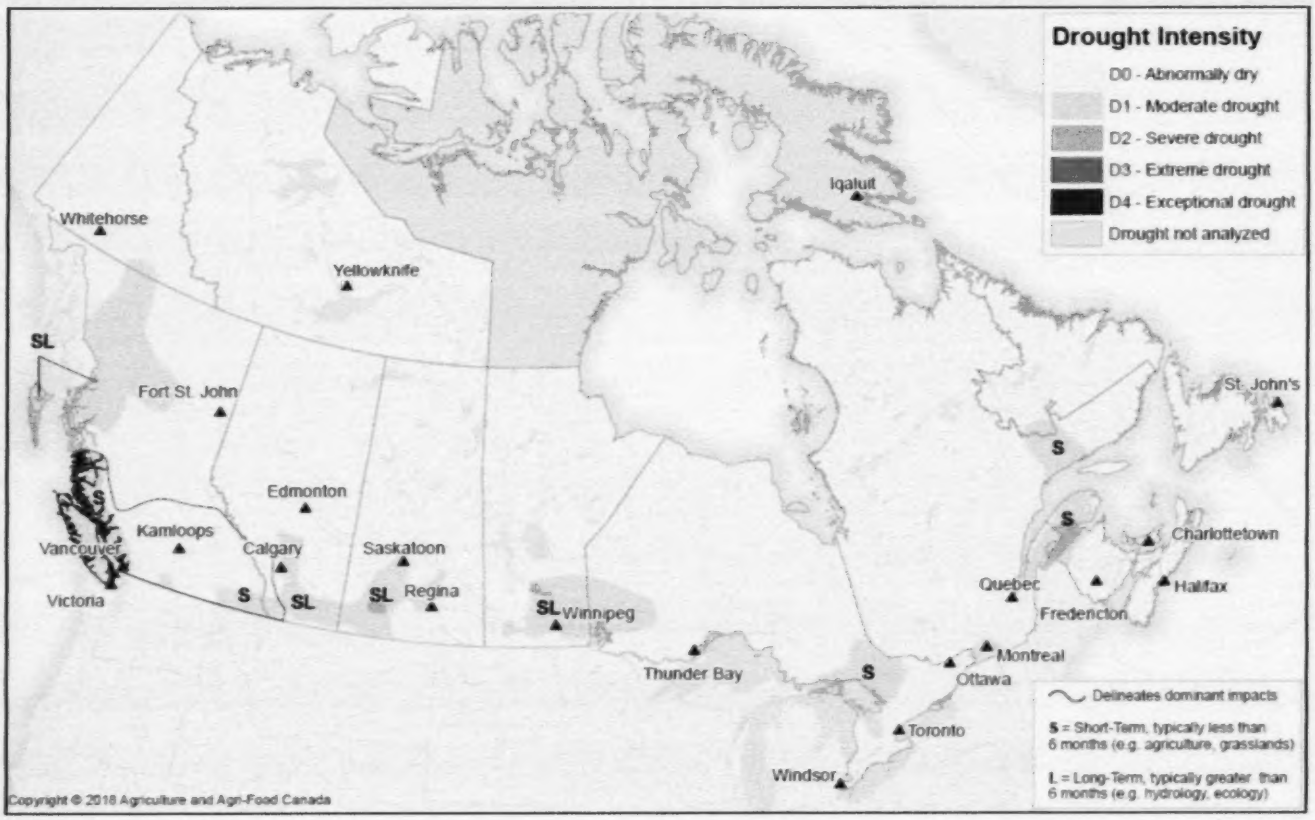
Canadian Drought Monitor

Conditions as of July 31st, 2018



Continued precipitation deficits and above average temperatures led to persisting and worsening drought across much of Canada in July. Agricultural impacts have been moderate to severe in many regions, and much of the country was experiencing hay shortages by the end of the month. Exceptionally high temperatures in British Columbia led to increased drought risk across the province, including regions that were previously experiencing excess moisture issues. The southern Prairies continued to remain dry during critical growing times, and drought expanded in the region. Hot temperatures and precipitation deficits led to emerging and worsening drought in Central Canada and northern New Brunswick, despite localized improvements towards the end of the month. Precipitation deficit and poor streamflow led to persisting drought risk in Northern Canada.

Pacific Region (BC)

Persistent warm temperatures and rainfall deficits led to deteriorating drought conditions across the Pacific region in July. Following spring floods and excess moisture in June, warm temperatures and below average precipitation in the Okanagan region resulted in the expansion of Abnormally Dry (D0) and the emergence of Moderate Drought (D1) pockets along the border with the United States. Precipitation deficits and poor streamflow along coastal British Columbia led to the expansion of D1 conditions throughout Vancouver Island and along the Vancouver coast. Satellite-derived soil moisture data indicated that soil moisture was well below the long-term average in northern B.C. and Haida Gwaii; thus, a large D1 pocket developed. The Peace region continued to experience excess moisture issues.

Prairie Region (AB, SK, MB)

Persisting warm temperatures and inadequate rainfall led to deteriorating drought conditions across the southern Prairies. Contrastingly, much of the northern Prairies received well above normal precipitation throughout June and July, leading to improvement of Abnormally Dry (D0) conditions in northwestern Alberta and northern Manitoba, and the development of excess moisture concerns in the Peace Region of Alberta. Moisture deficits in southern Alberta and southwestern Saskatchewan worsened throughout the month, and a large Moderate Drought (D1) pocket developed. First cut hay yields in southern Alberta were estimated to be lower-than-average, and by the end of the month, crops in the southern and central regions were in need of moisture to recover from signs of heat stress due to dry conditions. Moderate Drought (D1) conditions developed across the southwestern and central regions of Saskatchewan, deteriorating soil moisture. Poor topsoil moisture and heat in the southwest led to agricultural production delays, and significant rainfall is required to relieve crops. Hot temperatures and rainfall in Manitoba advanced crop rapidly, and harvest is expected to occur earlier than normal this year. Severe Drought (D2) persisted in the Interlake region throughout July. Areas with inadequate rain experienced moisture stress, leading to lighter textured soils in these regions having prematurely ripening crops. Hay yields across Manitoba were below normal at the end of the month, and rainfall is required in the southeast and Interlake regions for hay and pasture regrowth.

Central Region (ON, QC)

Warm and dry conditions in Central Canada led to the rapid deterioration of soil moisture and streamflow across the region. Much of the agricultural regions of Ontario and Quebec were engulfed by Abnormally Dry (D0) conditions by the end of the month. Conditions along the southeastern Manitoba border deteriorated to Moderate Drought (D1) due to significant precipitation deficits. Despite some moisture recovery during the second half of the month, a large D1 pocket developed in southern Ontario in response to exceptionally poor streamflow

and warm temperatures. Record rains in the Ottawa region towards the end of the month resulted in localized flooding and helped the area recover from drought-like conditions. A small area around Montreal did not improve quite as significantly, and remained in D1. The Bas-Saint-Laurent and Saguenay-Lac-Saint-Jean regions of Quebec experienced significant agricultural impacts and losses due to the drought in these areas, and Severe Drought (D2) developed along the northern New Brunswick border. By the end of the month, there was a hay shortage across the region.

Atlantic Region (NS, NB, PE. NL)

Most of Atlantic Canada continued to experience normal to above normal precipitation and above normal temperatures throughout July. A Severe Drought (D2) pocket emerged in northern New Brunswick due to high temperatures, below normal precipitation, and poor streamflow. Although Prince Edward Island received above average precipitation in June, warm temperatures and inadequate rainfall throughout July led to the development of an Abnormally Dry (D0) pocket on the eastern half of the province. Short term drought indices indicated D1 conditions in southwestern Labrador.

Northern Region (YT, NT)

Dryness in Northern Canada increased throughout the month of July. The Abnormally Dry (D0) pocket was expanded into northwestern Yukon and the southern Northwest Territories due to poor streamflow and soil moisture. Satellite- derived data indicated that part of the southern Yukon Territory had received adequate precipitation since April; thus D0 conditions around Haines Junction were alleviated.

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